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ABSTRACT

This paper reviews published articles related to the link between health insurance and academic performance. Although no studies directly examine whether enrollment in a health insurance program impacts school attendance and achievement, several studies have reached intermediate conclusions. Studies show that students who miss more than 10 days per semester have difficulty staying on grade level, and absenteeism due to chronic illness relates to even lower school achievement than the general high absence population. Teachers in urban areas report that 18% of students have health problems that significantly affect their ability to learn. Researchers have found that racial differences in health care access and use is due in part to lack of health insurance, and that for African-American and Latino youth insurance had more impact on doctor visits than income. Health insurance coverage relates to improved access to health services and improved health. Multiple barriers faced by many disadvantaged families in terms of health affect their children's school performance. Data from the California Healthy Start Initiative, a school-based/school-linked services collaborative, further supports the link between health insurance and good health. Evaluation of data from 76 participants shows positive results when the Initiative helps families get regular sources of health care. Attached are lists of references for future studies, for nutrition and school performance, for chronic illnesses and school performance, and for school health clinics, health, and school performance. (Contains 63 references and 26 footnotes.) (SM)

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THE LINK BETWEEN SCHOOL PERFORMANCE AND HEALTH INSURANCE: CURRENT RESEARCH

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Consumers Union
West Coast Regional Office

October 2000

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The Link Between School Performance and Health Insurance: Current Research

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This paper reviews published articles related to the link between health insurance and school performance and includes a list of citations on this topic. Although no studies we have found look directly at the question of whether enrollment in a health insurance program has an effect on school attendance and achievement, there are a number of studies supporting intermediate steps that may allow us to infer that conclusion.[1] These intermediate steps are as follows:

(1) Good health is connected with improved school performance, and
(2) Having health insurance is linked to better health.

The studies supporting these two arguments are discussed below.

Good Health Correlates Positively With School Performance

In 1990, the U.S. Department of Education set "National Education Goals," with "school readiness" being one goal. To achieve school readiness, the Department stated as one objective that, "Children will receive the nutrition and health care needed to arrive at school with healthy minds and bodies...".[2] In "Child Health and School Readiness: Background Paper on a National Educational Goal," author Nicholas Zill points out that "...the state of a child's physical and mental health can have substantial impact on the child's initial adjustment to school, on subsequent performance in school, and on the demands that the child makes on school resources."[3] Poor health can affect school performance in many ways, including contributing to absenteeism, affecting concentration level in the classroom, producing disruptive behavior (that could, in turn, affect the learning of all the students in the classroom), and affecting students' abilities to participate in extracurricular activities.

According to one study, students who miss more than 10 days in a 90-day semester have difficulty staying on grade level.[4] In a report on children with chronic poor health entitled, "The Influence of Health on School Outcomes," Wolfe found that absenteeism in general is associated with lower school achievement (measured by achievement groupings based on standardized test scores).[5] Also, she found that absenteeism due to chronic illness is

[1] Howard Taras of UCSD reports that he is investigating the relationship between a child having insurance and absence rates from school. (personal communication, September 8, 2000)
[2] N. Zill, *Child Health and School Readiness: Background Paper on a National Educational Goal*, (Washington, DC: Child Trends, Inc., October, 1990), p.2.
[3] Ibid.
[4] L. V. Klerman, "School Absence - A Health Perspective," *Pediatric Clinics of North America*, 35:1988, p.1254.
[5] B. L. Wolfe, "The Influence of Health on School Outcomes," *Medical Care*, 23(10):1985, p.1127-1138.

related to even lower school achievement than the general high absence population.[6] In 1988, U.S. children aged 5-17 lost a total of 222 million days from school because of illness, injury, or chronic health conditions. This translates to nearly five days per student per year.[7] Furthermore, students with chronic conditions (such as asthma, ear infections, arthritis, and seizures) missed significantly more days than students without chronic conditions.[8] Tooth decay, the single most common chronic childhood disease, greatly affects school absenteeism. The Dental Health Foundation found that children lose more than 51 million school hours each year to dental related illness.[9]

Teachers believe that they are seeing more students with health problems than in the past. A survey of teachers across the country found nearly unanimous agreement that a child's overall health and fitness are very important to his or her performance in school.[10] Teachers estimate that on average 12% of students have emotional or physical health problems that hinder school performance.[11] In urban schools the number is higher. Teachers in urban areas estimate that 18% of students have health problems that significantly affect their ability to learn.[12]

Having Health Insurance Is Linked to Better Health

Health insurance coverage is linked to improved access to health care services. Having a regular source of care not only promotes continuity of care, but also predicts the use of preventive services. The use of preventive services can decrease the use of emergency and other specialized services. Compared to their insured peers, uninsured children are eight times less likely to have a regular source of care. Uninsured children are 2.8 times less likely to have had a recent physician visit than their insured peers. They are four times more likely to delay seeking care and five times more likely to use the emergency room as a regular place of care. Lastly, uninsured children are six times more likely to have gone without needed medical, dental, or other health care than insured children.[13]

Researchers have begun to look at the positive effects of insuring previously uninsured children. In an article entitled, "Impact of a Children's Health Insurance Program on Newly Enrolled Children," author Judith Lave and her research team found that access to health care services dramatically improved within 12 months of health insurance enrollment. At 12 months, 99% of the children had a regular source of care and 85% had a regular dentist. The percentage of children reporting any unmet need or delayed care in the past six months

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[6] Ibid.
[7] Zill, p.2.
[8] Klerman, p.1257.
[9] Community Partnerships for Healthy Children Spotlight, *The Statistical Facts of Dental Health* (Sacramento, CA, Sierra Health Foundation, August 2000), p.6.
[10] American Academy of Pediatrics, *Health Care and a Child's Ability to Learn: A Survey of Elementary School Teachers*, (Chicago, IL: Porter/Novelli, 1992), p.2.
[11] Ibid.
[12] Ibid.
[13] American College of Physicians-American Society of Internal Medicine, *No Health Insurance? It's Enough to Make You Sick: Scientific Research Linking the Lack of Health Coverage to Poor Health*, (Washington, D.C.: ACP-ASIM, 1999), p.8-10, p.18.

decreased. The percentage of children seeing a physician increased, and the proportion visiting an emergency department decreased.[14]

Lave, et.al. examined another effect of becoming insured. At baseline, many parents reported that lack of insurance was a major stress on the family, that it caused financial strain, and that it prevented them from allowing their children to participate in certain activities. At the 12-month follow-up, they reported feeling less stress and having financial burdens eased; more parents were allowing their children to participate in activities.[15] This finding has especially important implications for educators because the well being of the entire family can be a critical element of a child's readiness to learn. In addition, the grades of children suffering from headaches and difficulty in seeing improved after they became insured and obtained glasses.[16]

In another article entitled, "The Impact of a Children's Health Insurance Program by Age," the authors (Keane, et. al.) examined the effects of enrollment in a health insurance program among different age groups of children. They found that before enrollment there were significant differences in most indicators across age groups. For example, their findings show that uninsured children aged 11 to 14 were 2.3 times as likely than were uninsured children aged 0 to 5 to have no regular provider. Uninsured children aged 15 to 19 were 2.7 times as likely than uninsured children aged 0 to 5 to have no regular provider. Also, before enrollment in a health insurance program, they found that children 11 to 14 years of age were 1.9 times more likely to experience unmet need or delay in receiving physician care than are children aged 0 to 5. Children aged 15 to 19 are 3.2 times as likely to experience unmet need or delay in care than are the very young children.[17] Overall, this study indicates that among uninsured children, older children are less likely to have their health care needs met than younger ones.

Keane and colleagues also investigated health indicators across age groups when children enroll in a health insurance program. They found that most of the age differences had disappeared or were markedly decreased by one year after enrollment. At the end of the year nearly every child had a regular physician. Also, after enrollment for one year unmet need and delayed care is practically non-existent in all age groups.[18]

In "Race, Ethnicity, and Access to Ambulatory Care Among US Adolescents," the authors (Lieu, et. al.) found that racial differences in health care access and use were attributable in part to a lack of health insurance. They found that after adjusting for factors such as health status and income, insurance remained an independent predictor of physician visits and having a regular source of care.[19] Furthermore, they found that among African-American and Latino adolescents, insurance had more pronounced effects than income in predicting

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[14] J. R. Lave, C. R. Keane, C. J. Lin, E. M. Ricci, G. Amersbach, C. P. LaVallee, "Impact of a Children's Health Insurance Program on Newly Enrolled Children," *JAMA*, 279:1998, p.1820.

[15] Ibid, p.1824.

[16] Ibid, p.1825.

[17] C. R. Keane, J. R. Lave, E. M. Ricci, C. P. LaVallee, "The Impact of a Children's Health Insurance Program by Age," *Pediatrics*, 104(5):1999, p.1051-1058.

[18] Ibid.

[19] T. A. Lieu, P. W. Newacheck, M. A. McManus, "Race, Ethnicity, and Access to Ambulatory Care among US Adolescents," *Am J Public Health*, 83(7):1993, p.964.

doctor visits.[20] Weinick and colleagues in the article "Children's Health Insurance, Access to Care, and Health Status: New Findings" found that Latino children, children whose parents have little education, and children who live in families without an employed parent are at disproportionately high risk of being uninsured, lacking a usual source of care, and being in fair or poor health.[21] The multiple barriers that these families face in terms of health could also be affecting the school performance of their children.

The Healthy Start Initiative Data

Data from the California Healthy Start Initiative further supports the link between health insurance and good health. The Healthy Start Initiative is a school based/school-linked services collaborative, promoting the health, educational, and social development of children that began in 1992. The Healthy Start program recognizes that educational success, physical health, emotional support, and family strength are inseparable. The underlying principle is that "local Healthy Start initiatives will be successful in improving student performance when they provide schoolwide services that directly support students' academic growth...or indirectly by addressing other needs such as nutrition and health services."[22]

In an evaluation completed with data from 76 grantees in 1997, the Healthy Start Initiative showed positive results when it worked with families to help them get regular sources of health care. This was a goal for the Initiative because, "Healthy children are expected to miss less school, with a reduction in the attendant obstacles to educational performance that absenteeism presents."[23] Of the children that Healthy Start followed, at intake nearly 40% were overdue for a physical examination. At six-month follow-up, less than half (or 17% of the total survey group) were overdue for a physical.[24] The effect of this use of preventive care becomes apparent when looking at the data regarding use of emergency departments. The number of Healthy Start clients that used emergency departments for non-emergency services dropped by more than two-thirds after involvement with Healthy Start.[25] Healthy Start data for hearing and/or vision problems show that almost 80% of the clients who had an uncorrected vision or hearing problem identified at intake had the problem(s) corrected at follow-up.[26] Children with good vision and hearing should be more likely to be active participants in the classroom.

Conclusion

Although no formal studies have linked children's health insurance coverage directly with improved school performance, the available research shows a two-stage link between insurance coverage and school performance. Children who are insured are more likely to be healthy, and children who are healthy are more likely to succeed in school.

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[20] Ibid.
[21] R. M. Weinick, M. E. Weigers, J. W. Cohen, "Children's Health Insurance, Access to Care, and Health Status: New Findings," *Health Affairs (Millwood)*, 17:1998, p.127-136.
[22] California Department of Education - Healthy Start and After School Partnerships Office, *Healthy Start Works* (Sacramento, CA: CDE, 1999), p.9.
[23] Ibid, p.14.
[24] Ibid.
[25] Ibid, p.15.
[26] Ibid.

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